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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,352	05/15/2006	Peter Noest	01012-1034	6264
30671 7590 11/14/2007 DITTHAVONG MORI & STEINER, P.C. 918 Prince St.			EXAMINER	
			VUONG, QUOCHIEN B	
Alexandria, VA 22314			ART UNIT	PAPER NUMBER
			2618	
•			MAIL DATE	DELIVERY MODE
			11/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/562,352	NOEST ET AL.			
Office Action Summary	Examiner	Art Unit			
	Quochien B. Vuong	2618			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) ☐ Responsive to communication(s) filed on <u>07 S</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This  3) ☐ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pr				
Disposition of Claims					
4) ☐ Claim(s) 1-4 and 7 is/are pending in the applic 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4 and 7 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.				
Application Papers	4.0				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the drawing(s) be held in abeyance. Setion is required if the drawing(s) is ol	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. Is have been received in Applications In the second secon	tion No red in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other:	Date			

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### **DETAILED ACTION**

This action is in response to applicant's response filed on 09/07/2007. Claims 1-4 and 7 are now pending in the present application. This action is made non-final.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1-4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4 recites the limitation "the output-power setting mechanism of the signal source" in claim 1, lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim 7, recites among other limitations "...the mechanical changeover switches are configured for switching to a first switching position wherein the electronic attenuator is connected between the signal source and the output, and a second switching position wherein a direct bypass line is connected between the signal source and the output, so that if a predetermined permitted level is exceeded at the output, the mechanical changeover switch at the output-end disconnects the electronic attenuator from the output, and the mechanical changeover switch at the input-end connects the electronic attenuator to the signal source" which is not clear whether the bold Italic

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part above is a new switching position or just the further explanation of the first and second switching positions (when both switches are at positions I or II). It is noted that when the mechanical changeover switch at the output-end disconnects the electronic attenuator from the output, and the mechanical changeover switch at the input-end connects the electronic attenuator to the signal source the circuit is open.

The claim is assumed as best understood by the examiner which has only two switching positions I and II. The following rejection is applied.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. (US 5,862,461) in view of Hashimoto (US 5,793,863).

Regarding claim 1, Yoshizawa et al. disclose an attenuator system for adjusting the output power of an HF signal source, the attenuator system comprising: an electronic attenuator (Fig. 7, #77; Col. 10, lines 46-48), a changeover switch at an inputend of the electronic attenuator (Fig. 7, #72); a changeover switch at an output-end of the electronic attenuator (Fig. 7, #73), and a switchgear for the changeover switches

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(Fig. 7, #76) is coupled to the output-power setting mechanism of the signal source (Col. 11, lines 41-43) wherein, above a predetermined output power (Col. 11, lines 44-45), the bypass lines is connected between the signal source and output (Col. 11, lines 57-59), and below the predetermined output power, the electronic attenuator is connected between the signal source and output (Col. 11, lines 60-63). Yoshizawa et al. do not specifically disclose the changeover switches are mechanical switches. However, Hashimoto disclose in figure 1, the switches 162 and 163 for selecting between two signal paths can be either mechanical or electrical switches ((column 3, lines 22-28). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hashimoto for using mechanical switches to the attenuator system of Yoshizawa et al. as a system design choice serving the same function for switching the signal path.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of Loehner et al. (US 5,347,239).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa further teaches the direct bypass line is formed as a mechanical attenuator (Col. 10, lines 44-49). Yoshizawa et al. fails to teach that the mechanical attenuator is switched of via mechanical switches between a plurality of attenuation values. However, Barrett teaches an attenuation network (Fig. 8) that switches between different attenuation values. Barrett teaches that the single-pole double throw switches

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are mechanical switches (Col. 2, lines 48-49). It would have been obvious to one of ordinary skill in the art to use the step attenuator of Barrett with the system of Yoshizawa et al. because it would allow the system to vary the gain with less power consumption.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of Gattz (US 3,369,096).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa et al. and Hashimoto fail to teach the mechanical changeover switches are bi-stable coaxial relay changeover switches. However, Gattz teaches a coaxial changeover switch (Col. 1, line 11, 16-17). It would have been obvious to one of ordinary skill in the art to use a coaxial changeover switch as the mechanical changeover switch because the coaxial changeover switch of Gattz will have minimal wear of the mechanical parts, which allows the system to last longer.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of.Tomita et al. (US 6,339,353).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa et al. and Hashimoto failsto teach that the mechanical changeover switches are transfer switches. However, Tomita et al. teaches a changeover switch that is comprised of transfer switches (Fig. 13, #94; Col. 12, lines 17-19). It would have

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been obvious to one of ordinary skill in the art to use transfer switches in place of the changeover switches because it would allow for a higher, power signal source.

# Response to Arguments

7. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Quochien B. Vuong Nov. 05, 2007.

QUOCHIEN B. VUONG PRIMARY EXAMINER